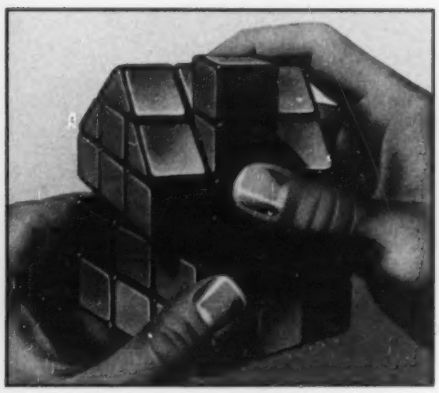
1991 Dodge/Sweet's Construction Outlook

Second Update
July 1991



The Decline Stops Here

Construction contracting data through the first half of 1991 offer two interpretations of how things stand in the building business.

A simple year-to-date match-up with 1990 puts the situation in its worst light: the value of total newly started construction at the end of six months was a dismal 16 percent less than for the opening half of 1990.

However, closer inspection shows that 1991's second quarter brought a small improvement. It wasn't much--contracting in the second quarter averaged two percent higher than in the first--but the importance was in the change of direction. After six consecutive quarters of decline (beginning with 1989:IV), even a small gain is welcome.

The reversal of the Dodge Index of construction contracting happened under promising circumstances. The economy is pulling out of recession, inflation is under control, and interest rates are workable. In this context it can be said that the first half of 1991 began with the end of one building cycle, and ended with the beginning of a new one.

Because the Dodge Index is the leading indicator of building activity, the key measures of the construction market will be "out of sync" for a couple of quarters. This usually happens at the cyclical turning points, and it's what is coming up next. Through most of the second half of 1991, when contracting for new construction will be rising, the value of expenditures for construction put in place, as well as manufacturers' shipments of building products, will continue to decline. Due to the shrinking volume of new work started late in 1990 and early in 1991, current spending for construction labor and materials won't bottom out for several more months.

The spring upturn of contracting, with continuing improvement throughout the year, should result in stabilized employment and materials demand before year-end. In 1992, all macro measures of construction activity will again be heading in the same direction...this time, up.

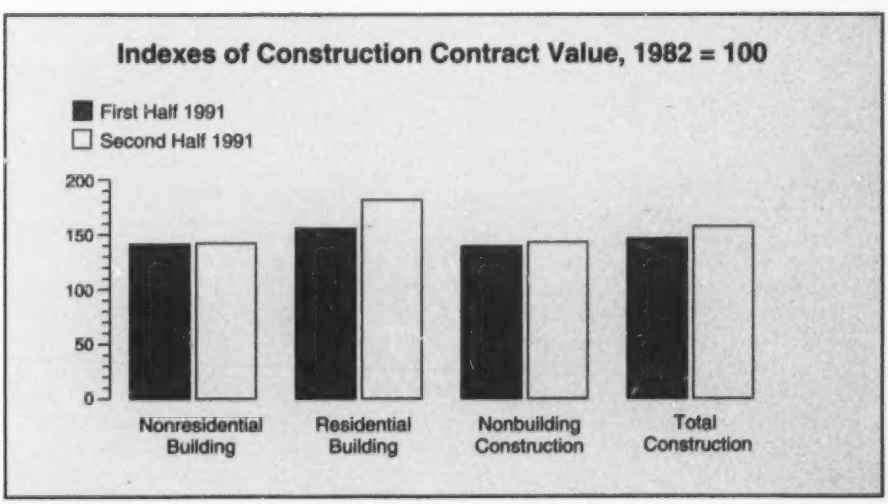
However, for 1991 as a whole, total construction contract value will finish in the negative column again despite the prospect for continued gain in the quarters ahead. A full year total of $226.5 billion of newly started projects, eight percent less than in 1990, will leave the Dodge Index at an estimated 144 for the whole of 1991.

With half the year behind us, the main concern of this Second Update of the 1991 *Outlook* for construction contracting is the contrast between the two halves of this "turnaround year" and the prospects for the second half.

Housing: The Leading Edge

Two generalizations are enough to summarize the outlook for the biggest of all the construction sector's sub-markets: (1) housing is where construction cycles usually begin, and this one is no exception; (2) there are two housing markets (one family/multifamily) but only one of them has the capability for short-term improvement.

The reversal for total housing starts is the most positive event so far in 1991, and that occurred early in the year. Starts hit bottom in January at an annualized rate of 850,000 units--just about where the 1982 crash came to rest. By mid-1991, the rate of starts had improved by 15 percent. Despite this recovery, however, June's rate of starts



barely exceeded 1 million units, and the average for the first half of the year came to only 900,000 units, ten percent fewer than in the previous six months. At this point, it would take an improbable 40 percent better second half (averaging 1,280,000 units) for 1991's full year total of housing starts to equal the historic lows of 1982 or 1975. It would appear that a new post-World War II record is in the making--the kind nobody wants. Qualitatively, however, 1991's smaller total--now estimated at an even 1,000,000 units--offers the benefit of a higher proportion of single family units than the former cyclical lows.

Multifamily Outlook Bleak

The prospect for near-term improvement in multifamily development is close to zero. This side of the housing market was already in steep decline before either the credit crisis or the recession compounded its oversupply problems. Between 1985 and 1989, under relatively favorable economic and credit conditions, annual starts of apartments and condos declined by 50 percent to 400,000 units. Since 1989, the breakdown of the banking industry has led to a further 50 percent decline, leaving the current rate of building at below 200,000 units.

The economy's recovery from its recent recession won't help the multifamily housing market much since it doesn't address the basic problems of oversupply or lender resistance. A nominal second half improvement over the extremely depressed present rate of building should result in a full year total of 200,000 units in 1991.

Singles:
Half a Recovery is Better than None

In the single family home market, the challenge is to regain the one million unit volume of the 1980s. It's a long way back to where this business was not very long ago.

For seven years (1983 through 1989), a supportive combination of demographics and affordability sustained one family homebuilding at an uncharacteristically steady million-unit-a-year pace. The credit crunch(s) of 1989 (S&Ls) and 1990 (Commercial Banks) changed all that. As lenders tightened terms on real estate credit, single family starts fell to an average of 825,000 units. And in the first half of 1991, when recession added economic uncertainty to the already hostile financial environment, they sagged below 700,000 in the first quarter before recovering a bit in the second.

How much improvement can be expected in 1991's second half? Demographics haven't changed, and for that reason it can be argued that after two years of underbuilding relative to this market's demonstrated potential, a backlog of pent-up demand--perhaps for 200,000 one family homes--exists beyond the current need for a million units annually. The recession's conclusion is restoring consumer confidence, according to opinion surveys, and low inflation spurs buying as confirmed by buoyant sales of existing homes.

Credit (not so much mortgage

1991 National Estimates
Dodge Construction Potentials

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	Nonresidential Buildings	1990 Actual	1991 Forecast	Percent Change 1991/90
Floor Area (millions of square feet)	Office Buildings	166	100	-40
	Stores & Other Commercial	486	360	-26
	Manufacturing Buildings	127	105	-17
	Total Commercial & Manufacturing	779	565	-27
	Educational	144	157	+9
	Hospital & Health	69	66	-4
	Other Nonresidential Buildings	152	142	-7
	Total Institutional & Other	365	365	--
	Total Nonresidential Buildings	1,144	930	-19
Contract Value (millions of dollars)	Office Buildings	$ 17,679	$ 11,925	-33
	Stores & Other Commercial	23,397	18,875	-19
	Manufacturing Buildings	8,182	7,550	-8
	Total Commercial & Manufacturing	$ 49,258	$ 38,350	-22
	Educational	$ 15,652	$ 17,175	+10
	Hospital & Health	9,039	8,900	-2
	Other Nonresidential Buildings	15,974	15,300	-4
	Total Institutional & Other	$ 40,665	$ 41,375	+2
	Total Nonresidential Buildings	$ 89,923	$ 79,725	-11
	Residential Buildings			
Dwelling Units* (thousands of units)	One Family Houses	834	800	-4
	Multifamily Housing	302	200	-34
	Total Housekeeping Residential	1,136	1,000	-12
Floor Area (millions of square feet)	One Family Houses	1,490	1,445	-3
	Multifamily Housing	326	220	-33
	Nonhousekeeping Residential	51	25	-51
	Total Residential Buildings	1,867	1,690	-9
Contract Value (millions of dollars)	One Family Houses	$ 83,479	$ 81,725	-2
	Multifamily Housing	17,317	12,675	-27
	Nonhousekeeping Residential	4,688	2,850	-39
	Total Residential Buildings	$105,484	$ 97,250	-8
	Nonbuilding Construction			
Contract Value (millions of dollars)	Transportation Construction	$ 24,597	$ 25,725	+5
	Environmental Construction	20,483	18,775	-8
	Total Public Works	$ 45,080	$ 44,500	-1
	Utilities	$ 4,883	$ 5,000	+2
	Total Nonbuilding Construction	$ 49,963	$ 49,500	-1
	All Construction			
Contract Value (millions of dollars)	**Total Construction**	$245,370	$226,475	-8
	Dodge Index (1982=100)	156	144	

*F.W. Dodge basis

1991 Regional Estimates
Dodge Construction Potentials

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July 1991

Northeast	CT, ME, MA, NH, NJ, NY, PA, RI, VT	1990 Actual	1991 Forecast	Percent Change 1991/90		1990 Actual	1991 Forecast	Percent Change 1991/90
Contract Value (millions of dollars)	**Nonresidential Building**				**Residential Building**			
	Commercial and Manufacturing	$ 8,995	$ 7,025	-22	One Family Houses	$ 9,857	$ 9,575	-3
	Institutional and Other	8,900	8,575	-4	Multifamily and Nhskpg.	3,741	3,325	-11
	Total	$17,895	$15,600	-13	**Total**	$13,598	$12,900	-5
	Nonbuilding Construction	$ 9,818	$9,975	+2	**Total Construction**	$41,311	$38,475	-7

North Central	IL, IN, IA, KS, MI, MN, MO, NE, ND, OH, SD, WI	1990 Actual	1991 Forecast	Percent Change 1991/90		1990 Actual	1991 Forecast	Percent Change 1991/90
Contract Value (millions of dollars)	**Nonresidential Building**				**Residential Building**			
	Commercial and Manufacturing	$11,928	$ 9,000	-25	One Family Houses	$17,729	$18,550	+5
	Institutional and Other	9,331	9,175	-2	Multifamily and Nhskpg.	4,574	3,150	-31
	Total	$21,259	$18,175	-15	**Total**	$22,303	$21,700	-3
	Nonbuilding Construction	$10,924	$10,850	-1	**Total Construction**	$54,486	$50,725	-7

South Atlantic	DE, DC, FL, GA, MD, NC, SC, VA, WV	1990 Actual	1991 Forecast	Percent Change 1991/90		1990 Actual	1991 Forecast	Percent Change 1991/90
Contract Value (millions of dollars)	**Nonresidential Building**				**Residential Building**			
	Commercial and Manufacturing	$ 9,303	$ 6,950	-25	One Family Houses	$19,942	$19,100	-4
	Institutional and Other	7,727	8,400	+9	Multifamily and Nhskpg.	4,794	3,025	-37
	Total	$17,030	$15,350	-10	**Total**	$24,736	$22,125	-11
	Nonbuilding Construction	$ 8,519	$ 8,450	-1	**Total Construction**	$50,285	$45,925	-9

South Central	AL, AR, KY, LA, MS, OK, TN, TX	1990 Actual	1991 Forecast	Percent Change 1991/90		1990 Actual	1991 Forecast	Percent Change 1991/90
Contract Value (millions of dollars)	**Nonresidential Building**				**Residential Building**			
	Commercial and Manufacturing	$ 6,002	$ 5,225	-13	One Family Houses	$10,917	$11,650	+7
	Institutional and Other	5,266	5,900	+12	Multifamily and Nhskpg.	1,315	1,125	-14
	Total	$11,268	$11,125	-1	**Total**	$12,232	$12,775	+4
	Nonbuilding Construction	$ 8,405	$ 8,150	-3	**Total Construction**	$31,905	$32,050	--

West	AK, AZ, CA, CO, HI, ID, MT, NV, NM, OR, UT, WA, WY	1990 Actual	1991 Forecast	Percent Change 1991/90		1990 Actual	1991 Forecast	Percent Change 1991/90
Contract Value (millions of dollars)	**Nonresidential Building**				**Residential Building**			
	Commercial and Manufacturing	$13,030	$10,150	-22	One Family Houses	$25,034	$22,850	-9
	Institutional and Other	9,441	9,325	-1	Multifamily and Nhskpg.	7,581	4,900	-35
	Total	$22,471	$19,475	-13	**Total**	$32,615	$27,750	-15
	Nonbuilding Construction	$12,297	$12,075	-2	**Total Construction**	$67,383	$59,300	-12

money or construction loans) is the immediate impediment to even a partial recovery of the housing market. Cleaning up the mess that real estate lending became in the 1980s will retard the recovery of homebuilding to half its customary pace this time around. Even at that, one family housing will be the dynamic part of the construction sector for the time being as starts advance to an average rate of 900,000 units in the second half of 1991.

Beyond 1991

Supply issues--the oversupply of multifamily units and the scarcity of development funds for singles--will continue to inhibit the expansion of total housing starts well beyond the current year. In 1991, the estimated 1,000,000 units (800,000 singles; 200,000 multis) even seems like a stretch at this point, since it would require a fourth quarter rate of as much as 1,150,000 units. If this can be achieved, a 1992 total of between 1,200,000 and 1,225,000 units (a year-to-year gain of 20 percent or more) is within

reach. As in 1991, most of next year's potential will be in one family homes.

Commercial and Industrial Building: Wait 'til Next Year...Or the Year After

One of the lessons learned from previous building cycles is that it would be unrealistic to look for a revival of commercial and industrial building for at least a year after the conclusion of a general recession.

- Employment growth needed to fill empty offices is notoriously slow to rebound as firms exert cost controls to restore profitability. The unemployment rate, now crowding 7 percent, isn't likely to retreat below 6 percent for another year or two.
- Recessions leave the manufacturing sector with excess capacity which must be taken up before new facilities are needed. Capacity utilization is currently only 77 percent.
- Shopping center development, which is a derivative of homebuilding, needs a solid recovery of the housing market as a stimulus.

For these reasons, even under ordinary circumstances, the recovery sequence of the construction cycle leaves commercial and industrial building out of the action for at least the first year. And 1991 could hardly be called "ordinary circumstances."

This time the lag is apt to be longer than usual for reasons that predate the recent recession: the commercial building market was in distress long before the economy's 1990/91 setback. Overdevelopment in the mid-80s building boom, which had been "subsidized" by accelerated depreciation, distorted normal supply/demand relationships.

Even before tax reform restored full depreciation, soaring vacancy rates prompted a determined cutback of new construction (especially, but not exclusively, office buildings) in an attempt to restore balance. But once recession set in, demand for commercial space fell as fast as supply could be reduced, thwarting the absorption of surplus space. To make matters worse, the bail out of the S&L industry leaves the Resolution Trust Corporation with 1,300 office buildings, 600 shopping centers, and nearly 200 hotels to unload on any terms it can negotiate.

Just how long it takes for the commercial/industrial building sector to recover from the chaotic condition of the 1980s is a subject for next fall's 1992 *Outlook*. But it is apparent that this market will not fulfill its traditional role of "second stage booster" next year. For the nearer term, the coming and going of the 1990/91 recession finally established the bottom of the commercial/industrial slide in 1991's first half at just under $40 billion (annualized rate). Stability close to this depressed rate of contracting is the most likely prospect for the remainder of the year.

Public Construction: What Recession?

The contrast between private and public construction markets is an interesting sub-plot of the 1990/91 recession. Since 1989:III, private building (housing and commercial) collapsed by more than one-third, yet public construction (institutional and infrastructure) is still as strong in 1991 as it was at the 1989 peak.

While so much has been going wrong for the past couple of years, here's an insulated part of the construction market where--at least until now--things have been going right. Insulated, in this case, means independent of the stressed-out banking system. Dependence on public funding carries its own risks, however.

In 1991's second half (and in 1992, as well), institutional building could be exposed to some unfamiliar resistance. Although the need for schools, healthcare facilities, and other public buildings continues to mount, the ability of state and local governments to provide them has been diminished by the consequences of recession--falling tax revenue and rising social benefits. Most state budgets are being squeezed, and in several prominent cases (e.g., California, Connecticut, Massachusetts, New York) major fiscal surgery is needed to close huge deficits. Because most states and cities operate on a July through June calendar, the second half of 1991 will reflect a different set of priorities.

Operating expenses (salaries especially) are at greater immediate risk than capital projects, but deferral of some marginal construction plans is inevitable.

The Federal side of the public construction market, which is mainly concerned with the long-term development of the nation's infrastructure, is inherently more stable. Through mid-1991, the major Federal construction programs--for transportation (DOT) and for waste treatment facilities (EPA)--were supporting approximately the same level of contracting for new construction as they did at this time last year.

On October 1st, the upcoming Federal budget will launch a new five-year DOT transportation program to replace the expired Surface Transportation Assistance Act. Like STAA, which escalated spending for highways and mass transit during the mid-1980s, the new program, with its proposed price tag of $123 billion, will do it again. Details are vague at this point, since Congress and the Administration are still debating how much emphasis should be given to highways vs. mass transit. This much seems agreed upon: total spending (over five years) will be up at least 15 percent, and states will be required to bear more of the cost. Whether or not the new program will require another fuel tax (on top of last December's 5 cents/gallon) is another matter still to be settled. Due to its timing, the new transportation act will have only a small impact on contracting in 1991's second half, but it could be enough to offset potential weakness in state initiated construction.

For total public construction, 1991's second half won't be much different from the first half except in its Federal/State make-up, with less of the latter.

New Strategies Needed?

In its early stage, this recovery will not look much different from previous ones. Initially, one family homebuilding will carry total construction contracting ahead while nonresidential building stabilizes. Overall, this means an improving second half--by perhaps ten percent--but the improvement will be confined to housing.

Beyond 1991, beware! Although it is reasonably safe to say that decline of construction contracting reached its end earlier this year, it can't be taken for granted that the usual vigorous recovery--starting with housing, and reinforced by nonresidential building--will follow. On the contrary, the path of the next cycle of construction is strewn with obstacles: a broken down banking system, an overdeveloped commercial real estate market, a shrinking young adult population, to name a few. These are some of the issues to be dealt with in October's 1992 *Outlook*.

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1992 Dodge/Sweet's Construction Outlook

First Update
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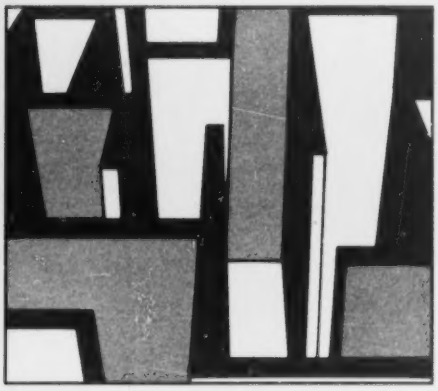

OUT OF THE TUNNEL

When the original **1992 Outlook** went to press last October, the construction market was in a state of transition. The leading indicator of construction and building materials demand, the *Dodge Index of construction contracting*, was making a tenuous recovery from a decline which lasted six consecutive quarters. The Index's turnaround offered the promise of the start of a new building cycle. The industry's coincident indicator, expenditures for *Construction Put In Place*, hadn't yet shown improvement, but seemed to be stablilizing after an extended decline that paralleled the index of contracting. While these were signs that forces within the construction sector were coming together to launch a new period of expansion, recovery was by no means certain.

During the fall and winter months, positive events, as well as a few negative ones, modified some of the details of the **1992 Outlook** for construction contracting without altering its basic message of recovery.

With the 1990 budget resolution neutralizing fiscal policy, monetary policy has become more aggressive as indicated by the significant lowering of interest rates last December. That month also brought passage of the new Federal transportation program, which provides for a substantial escalation of funding for highway and bridge construction. But it was also during this period that consumer confidence plummeted as the economy's fragile recovery stalled for two anxiety-filled quarters.

On balance, developments since last October's edition of the 1992 Construction Outlook appear to have favored the construction industry more than others. The evidence:

- Expenditures for construction put in place (i.e., work being brought to completion) did, in fact, turn up in 1991's final quarter, confirming the earlier improvement in the industry's leading indicator, construction contracting.
- Contracting for new construction continued to advance through 1991's second half and into the first quarter of 1992. Preliminary data for 1992:I show the Dodge Index averaging 96 (1987 now replaces 1982 as the 100 base), nearly 15 percent above its year-earlier low of 84. Most of this recent improvement in newly-started projects has yet to be realized in spending for materials and wages on the job site.

This update of the **1992 Outlook**, examines the prospects for construction contracting in the year ahead under two broad groupings: those categories of construction which are cyclically sensitive, and those which are inherently stable.

THE CYCLICALS

One Family Housing

Recovery of the Dodge Index from early 1991 to the present has been due principally to the revival of home-building. Largely in response to falling mortgage rates, one family housing starts increased in each quarter of 1991, from a low starting rate of 700,000 units (F. W. Dodge basis) to finish comfortably above 850,000 units. The early 1992 rate of building, by then on the high side of 900,000 units, was as yet an incomplete recovery to the pre-recession/pre-credit crunch volume of the late 1980s, and it is reasonable to expect that further improvement can be sustained through 1992.

For more than one reason, single family home building could overshoot its potential and then settle back. After two years (1990 and 1991) when starts averaged only slightly over 800,000 units — compared with the previously demonstrated demand for a million homes annually — there exists a backlog of demand to be met over and above current needs. The powerful combination of low interest rates, solid demographics, and a temporary tax incentive will sustain the one family housing market's recovery through 1992 and beyond. It is now estimated that the rate of starts, currently in the range of 950,000 to 975,000 units, will cross the one million unit threshold before mid-1992 and continue to rise to a peak rate of 1.050 to 1.075 million units by mid-1993. This pattern would bring the 1992 total to 985,000 new homes — a gain of just under 25 percent from the 1991 total — with room for a further advance of about 10 percent in 1993.

Income Properties

The most that can be said for the building industry's hardship cases — offices, hotels, shopping centers, condos and apartments — is that after five years of "adjusting" to the mid-1980s over-development, downside risk for this group is now negligible. That's not saying much.

The succession of tax reform (1986/87), credit crunch (1989/90) and recession (1990/91) have taken their toll in reducing the outpouring of unwanted buildings, and little, if any, further cutback seems necessary. At a combined total of approximately 650 million square feet of new construction last year — less than half the average of the mid-1980s — this depressed level of building is no more appropriate than was the exaggerated volume generated during the tax-sheltered boom years. Yet, while the risk of further decline is minimal, there is little justification for near-term improvement. Two impediments to recovery are formidable.

- The banking system is gradually working its way out of near-collapse in 1990, but it will be a long time before chastened lenders will again be eager to back commercial real estate development. And even when they are ready, a far stricter set of standards will apply.
- Before developers are willing to re-enter this depressed market, the tedious process of assimilating the vast surplus of empty space left over from the "Irresponsible Eighties" must be completed. So far, five years of diminished building have done little to reduce vacancy rates from their late-1980 highs. Consequently, the value of existing properties continues to decline, discouraging investment in new facilities.

It remains for a slowly recovering economy and gradually rising employment to reduce oppressive vacancy rates so that higher levels of building can again become profitable. Meanwhile, stability of contracting at close to the 1991 volume is the best that can be expected.

A fine tuning of last October's estimates for the income properties group now leaves a slightly lower volume of building in both 1991 and 1992 but, as before, little change from last year to this one.

1992 National Estimates — First Update April 1992

Dodge Construction Potentials

		1991 Actual	1992 Forecast	Percent Change 1992/91
Nonresidential Buildings				
Floor Area (millions of square feet)	Office Buildings	91	85	-7
	Stores & Shopping Centers	173	155	-10
	Other Commercial	206	195	-5
	Manufacturing Buildings	95	90	-5
	Total Commercial & Manufacturing	565	525	-7
	Educational	165	155	-7
	Hospital & Health	70	67	-4
	Other Nonresidential Buildings	162	155	-4
	Total Institutional & Other	397	377	-6
	Total Nonresidential Buildings	962	900	-6
Contract Value (millions of dollars)	Office Buildings	$ 11,462	$ 11,125	-3
	Stores & Shopping Centers	11,232	10,575	-6
	Other Commercial	9,762	9,650	-2
	Manufacturing Buildings	7,650	7,450	-3
	Total Commercial & Manufacturing	$ 40,106	$ 38,800	-4
	Educational	$ 17,665	$ 16,975	-4
	Hospital & Health	9,237	9,150	-1
	Other Nonresidential Buildings	17,349	17,175	-1
	Total Institutional & Other	$ 44,251	$ 43,300	-2
	Total Nonresidential Buildings	$ 84,357	$ 82,100	-3
Residential Buildings				
Dwelling Units* (thousands of units)	One Family Houses	796	990	+24
	Multifamily Housing	184	190	+3
	Total Residential Buildings	980	1,175	+20
Floor Area (millions of square feet)	One Family Houses	1,412	1,750	+24
	Multifamily Housing	207	212	+2
	Total Residential Buildings	1,619	1,963	+21
Contract Value (millions of dollars)	One Family Houses	$ 82,299	$104,500	+27
	Multifamily Housing	11,954	12,500	+5
	Total Residential Buildings	$ 94,253	$117,000	+24
Nonbuilding Construction				
Contract Value (millions of dollars)	Transportation Construction	$ 29,510	$ 32,500	+10
	Environmental Construction	15,085	15,500	+3
	Total Public Works	$ 44,595	$ 48,000	+8
	Utilities	$ 4,352	$ 4,600	+6
	Total Nonbuilding Construction	$ 48,947	$ 52,600	+8
All Construction				
Contract Value (millions of dollars)	**Total Construction**	$227,557	$251,700	+10
	Dodge Index (1987=100)	88	97	

*F.W. Dodge basis

THE STABILIZERS

Institutional Buildings

While contracting for commercial buildings was soaring through the first half of the 1980s and crashing in the second half, institutional building kept plodding ahead — slowly, but steadily. From the beginning to the end of the decade, contracting for schools, healthcare facilities, and various other public buildings expanded from an annual value of $20 billion in 1980 to just over $40 billion by 1990, and presently constitutes more than half the total of all nonresidential building.

This remarkable record of growth,

1992 Regional Estimates
Dodge Construction Potentials

First Update
April 1992

Northeast

CT, ME, MA, NH, NJ, NY, PA, RI, VT

Contract Value (millions of dollars)

	1991 Actual	1992 Forecast	Percent Change 1992/91
Nonresidential Building			
Commercial and Manufacturing	$ 6,589	$ 6,225	-6
Institutional and Other	9,103	8,450	-7
Total	$15,692	$14,675	-6
Nonbuilding Construction	$10,641	$11,325	+6
Residential Building			
One Family Houses	$10,247	$12,350	+21
Multifamily Housing	2,432	2,425	–
Total	$12,679	$14,775	+17
Total Construction	$39,012	$40,775	+5

North Central

IL, IN, IA, KS, MI, MN, MO, NE, ND, OH, SD, WI

Contract Value (millions of dollars)

	1991 Actual	1992 Forecast	Percent Change 1992/91
Nonresidential Building			
Commercial and Manufacturing	$ 8,942	$ 9,175	+3
Institutional and Other	9,544	9,750	+2
Total	$18,486	$18,875	+2
Nonbuilding Construction	$10,194	$11,025	+8
Residential Building			
One Family Houses	$19,147	$23,575	+23
Multifamily Housing	2,528	2,700	+7
Total	$21,675	$26,275	+21
Total Construction	$50,355	$56,175	+12

South Atlantic

DE, DC, FL, GA, MD, NC, SC, VA, WV

Contract Value (millions of dollars)

	1991 Actual	1992 Forecast	Percent Change 1992/91
Nonresidential Building			
Commercial and Manufacturing	$ 7,340	$ 7,225	-2
Institutional and Other	8,850	8,475	-4
Total	$16,190	$15,700	-3
Nonbuilding Construction	$ 8,152	$ 8,575	+5
Residential Building			
One Family Houses	$19,325	$25,725	+33
Multifamily Housing	2,590	2,800	+8
Total	$21,915	$28,525	+30
Total Construction	$46,257	$52,800	+14

South Central

AL, AR, KY, LA, MS, OK, TN, TX

Contract Value (millions of dollars)

	1991 Actual	1992 Forecast	Percent Change 1992/91
Nonresidential Building			
Commercial and Manufacturing	$ 6,026	$ 6,225	+3
Institutional and Other	6,576	6,750	+2
Total	$12,602	$12,975	+3
Nonbuilding Construction	$ 8,180	$ 8,550	+9
Residential Building			
One Family Houses	$11,734	$16,050	+37
Multifamily Housing	926	975	+5
Total	$12,660	$17,025	+34
Total Construction	$33,442	$38,900	+16

West

AK, AZ, CA, CO, HI, ID, MT, NV, NM, OR, UT, WA, WY

Contract Value (millions of dollars)

	1991 Actual	1992 Forecast	Percent Change 1992/91
Nonresidential Building			
Commercial and Manufacturing	$11,209	$ 9,800	-13
Institutional and Other	10,178	9,825	-3
Total	$21,387	$19,625	-8
Nonbuilding Construction	$11,780	$12,775	+8
Residential Building			
One Family Houses	$21,846	$28,650	+22
Multifamily Housing	3,478	3,600	+4
Total	$25,324	$30,250	+19
Total Construction	$58,491	$62,650	+7

which was based on solid demographics and dependable funding, is subject to a temporary interruption in 1992. The demographics haven't changed, but the funding has.

The biggest share of institutional building (roughly half the total) is educational facilities, and schools owe much of their financial support to state and local government budgets, which are in a severe squeeze. The situation is summarized in a statement from the latest "Fiscal Survey Of The States," by the National Governors' Association: "...a conflict between slow revenue growth and rapidly escalating costs (requires) a shift toward healthcare and corrections, a trade-off against states' long-run investment in schools, infrastructure, and the environment."

Although the full year 1991 total of educational building brought the decade-long upward trend to a new high, the rate of contracting for schools leveled off in

last year's second half. That was when most states had to adjust to austere fiscal 1992 budgets. The lost momentum can be viewed as the transition to a temporary setback in calendar year 1992. Data for the early months of this year appear to support this interpretation.

An expected 5 percent decline of educational construction contracting in 1992 will leave total institutional building short of 1991's record value by 2 or 3 percent, interrupting the long string of yearly increases. Once the pressure on state/local budgets is relieved, however, the upward trend of educational, healthcare and other institutional building will resume in response to demographics.

Public Works Construction

Although the usually reliable institutional building market will not be playing its supporting role in 1992, the public works sector can be trusted to fill the void. The scene shifts from state to Federal government.

During the first half of the Federal government's current fiscal year (which began last October first), contracting for public works construction has been running 10 percent higher than in fiscal 1991. More recently, it has been even stronger – a situation that seems contrary to the rules of the 1990 budget accord. The rules say that in order to keep the deficit from rising, discretionary spending may not be increased unless matched by higher tax revenues. And the President says, "No new . . ." Obviously, it hasn't been hard for seasoned bureaucrats to find a way around the rules.

One way is to spend faster. Since last fall, the Administration (with the Presidential blessing) has been accelerating the distribution of some $10 billion of already appropriated funds for existing public works programs. The object: to give the stalled economy a much-needed lift without increasing the deficit.

Another way is to extend an established tax that was due to elapse. That's one of the features of the new transportation program, the Intermodal Surface Transportation Efficiency Act of 1991, which is capable of escalating highway/bridge construction by as much as 30 percent over the next six years. ISTEA, the successor to the Surface Transportation Acts of 1982 and 1987, stretches the 2 1/2¢ per gallon fuel tax that was established by the 1990 budget agreement beyond its 1995 expiration date. (A tax of 2 1/2¢ per gallon, incidentally, is capable of raising as much as $3 billion per year.)

This new program which took effect last December authorizes a total of $120 billion for highway and bridge construction through 1997, potentially one-third more than the $88 billion provided by the 1987 STAA. This year, authorizations are up 10 percent (from $16 billion to $18 billion) and in 1993 they are slated to rise another 10 percent to a $20 billion plateau for the following five years.

Largely on the strength of ISTEA, total public works construction contracting is estimated to advance by 8 percent this year, the first step in a breakaway from five years spent in the narrow band of $43 billion to $45 billion.

	THE PEAK 1989	THE RECESSION 1990	1991	THE RECOVERY 1992
TOTAL CONSTRUCTION	$271.2	$246.3	$227.6	$251.3
	+3%	-9%	-8%	+10%
THE STABILIZERS				
Institutional Bldgs	$ 39.8	$ 42.1	$ 44.3	$ 43.1
Public Works	44.4	44.8	44.6	48.1
Total	$ 84.2	$ 86.9	$ 88.9	$ 91.2
	+6%	+3%	+2%	+3%
THE CYCLICALS				
One Family Homes	$ 93.4	$ 83.4	$ 82.3	$104.4
Income Properties	76.4	62.6	44.4	43.7
Industrial Bldgs	12.7	8.4	7.7	7.4
Total	$182.5	$154.4	$134.4	$155.5
	+3%	-15%	-13%	+16%

A TWO-H RECOVERY

The accompanying table tracks construction contracting from 1989, the peak of the 1980s building cycle, through the 1990/91 recession, and into this year's recovery. As a generalization, it can be said that the 1991/92 construction recession was approximately as long, but shallower than the two previous ones (early 1980s; mid-1970s). The specifics, however, are more important than the generality.

- The **cyclicals**, comprising approximately 70 percent of total construction, delivered 100 percent of the two year recession with back-to-back declines of 15 percent in 1990 and another 13 percent in 1991.
- True to their name, the **stabilizers** had a moderating effect on the recession, providing steady gains of 2 to 3 percent even at the worst of times.
- Recovery, which is already several quarters along, won't show up in *annual* data until 1992. (Call 1991 the turnaround year.) As it develops, recovery will be paced by one family home building (+25 percent to +30 percent) and highways/bridges (+10 percent).
- Two other key groups — institutional buildings and income properties — are headed for relatively small declines (less than 5 percent) in 1992. The all-important difference: institutional building will be settling back from a record high in 1991; income properties will fail to reverse a five-year slide.
- As total construction contracting improves by 10 percent in 1992, all five major regions of the country will show some, though not equal, improvement. Regions with prospects for average (i.e. 10 percent) gains: the North Central and the South Atlantic; above average: the South Central; below average: the Northeast and the West.

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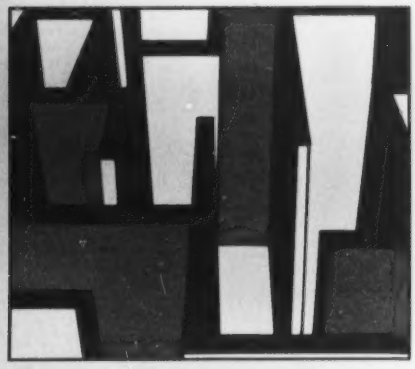
1992 Dodge/Sweet's Construction Outlook

Second Update
July 1992



RECOVERY: A PROGRESS REPORT

It was a little more than a year ago that the **Dodge Index** of contracting for new construction heralded the building industry's recovery from its post-80s crash. Although the rebound has been less than dazzling — it wasn't expected to be — the first year of revival has nevertheless brought welcome improvement. Between 1991:I (the starting point) and 1992:I, this leading indicator of construction expenditures and building materials demand regained a little more than half its recession loss.

Outlays for **Construction Put in Place** later confirmed the industry's change of direction with a tentative upturn in 1991's second half, which gathered momentum going into 1992. The two "macromeasures" of the construction sector were saying that a new cycle of building was on its way. Or so it seemed until 1992's second quarter.

A scary 5 percent decline of contracting for new projects in the second quarter suddenly raises the question of whether this year-old recovery is in danger of stalling out. Is it capable of making the critical transition from a flashy spurt of one family homebuilding to a more lasting expansion embracing multifamily housing, commercial and institutional building, and infrastructure work? That's the key issue to be addressed in this Second Update of the 1992 Outlook.

A Step Backward

So what went wrong in 1992's second quarter? Until then, the recovery of the construction sector appeared to be progressing "by the book." Falling interest rates and gradually reviving consumer confidence together lifted the rate of one family housing starts from its low of 700,000 units (F. W. Dodge basis) in 1991:I to a highly respectable 975,000 unit rate by the end of the year. Having almost reached business as usual volume, homebuilding then became more of a steadying influence than a continuing source of expansion in 1992's first half.

At the same time, two unrelated events in the public works arena introduced an element of instability into the recovery sequence. A brief delay between the expiration of the former Federal transportation program last September and the enactment of the new one in December created a temporary backlog of contracting for highways/bridges that erupted in1992's opening quarter. Simultaneously, the Bush Administration was trying to give the sagging economy a jolt of fiscal thrust (without actually engaging in forbidden deficit spending) by accelerating the disbursement of already appropriated public works funds. The consequence of these actions was to produce a "spike" of contracting for public works construction in the first quarter, and some inevitable backlash in the second.

This erratic behavior of public works contracting during the first half of 1992 does not pose a serious threat to the continuing recovery of the construction sector. As the new transportation program shakes down, the rest of the year should bring renewed stability to public works construction at a rate below that of the distorted first quarter but higher than the second, leaving a comfortable net gain for the year as a whole.

An ominous side-effect of the "strong-then-weak" pattern of public works construction during this year's first half has been to conceal — and then to expose— the most vulnerable feature of this newly-forming building cycle: the chaotic commercial real estate market.

Based on past experience, it is still early in the game to be looking for support from the commercial sector. For at least a year following a general business recession it is enough to ask that commercial real estate development simply remains dormant, neither complementing nor undercutting the building industry's revival. But in 1992, the grossly overbuilt commercial market is still in decline, acting as a drag on the recovery. This condition was concealed early in the year by the burst of public works construction, but it became all too apparent in the second quarter. Until commercial building stabilizes and eventually picks up, the building cycle of the 1990s will remain stuck in low gear.

Regaining Momentum

The strength of the 1992 recovery of the construction sector depends, as always, on the interaction of the four major sub-markets. **One family housing,** by now nearly fully recovered, has only a little room for still further improvement. **Commercial building** isn't capable of providing much support in the near future, but should soon cease being an offset to expansion in other areas. **Public works construction**, once it settles down, will get a boost this year from the quinquennial escalation of the Federal highway program. And **institutional building**, presently feeling the pinch of state governments' fiscal stress, will remain "on hold" at least until 1993. For the time being, it's still a "2-H" recovery: homebuilding and highways.

THE CYCLICALS

One Family Housing: The decade of the 1980s showed that under workable financial and economic conditions, the housing market — driven by the needs of the maturing 50's generation (and their kids) — could absorb a steady output of a million new one family units per year. From 1983 through 1988 production seldom strayed from that volume, resulting in a six year total of 6,060,000 new homes built and sold. (No overbuilding here, in sharp contrast to multifamily housing.) What's more, the recent strong rebound from a recession volume of only 800,000 units per year in both 1990 and 1991 shows that the market fundamentals didn't change much while the economy strayed off course. With the annualized rate of single family housing starts back in the high 900,000s in 1992's first half, the question is "How much room is left at the top?"

If the sustainable upper limit, as indicated by pre-recession experience, is still one million single family homes per year, two scenarios are most likely. In one of them, housing starts reach the one million unit level in the second half of 1992 and remain at that volume, as they did in the 1980s, until financial/economic conditions change. In the other, the rate of starts temporarily exceeds one million units as deferred demand carried over from 1990 and 1991 surfaces with current needs.

Considering that housing output in 1990 and 1991 reached only 80 percent of the potential, it is not unreasonable to expect that some deferred demand will evolve as the economy's recovery becomes more firmly established over the next several quarters. However, with rising unemployment creating insecurity and indecision at mid-1992, this "bonus" is more apt to show up in 1993. A conservative estimate of this elusive "pent-up demand" could lift next year's one family housing starts close to 1.1 million units, but the practical limit for 1992 is more like 1.0 million or a shade

1992 National Estimates
Dodge Construction Potentials

Second Update
July 1992

		1991 Actual	1992 Forecast	Percent Change 1992/91
Nonresidential Buildings				
Floor Area (millions of square feet)	Office Buildings	92	85	-8
	Stores & Shopping Centers	173	165	-5
	Other Commercial	209	190	-9
	Manufacturing Buildings	97	90	-7
	Total Commercial & Manufacturing	571	530	-7
	Educational	164	150	-9
	Hospital & Health	71	72	+1
	Other Nonresidential Buildings	164	158	-4
	Total Institutional & Other	399	380	-5
	Total Nonresidential Buildings	970	910	-6
Contract Value (millions of dollars)	Office Buildings	$ 11,505	$ 11,300	-2
	Stores & Shopping Centers	11,214	11,050	-1
	Other Commercial	9,900	9,650	-3
	Manufacturing Buildings	7,780	7,425	-5
	Total Commercial & Manufacturing	$ 40,399	$ 39,425	-2
	Educational	$ 17,614	$ 16,650	-5
	Hospital & Health	9,456	10,150	+7
	Other Nonresidential Buildings	17,551	17,925	+2
	Total Institutional & Other	$ 44,621	$ 44,725	–
	Total Nonresidential Buildings	$ 85,020	$ 84,150	-1
Residential Buildings				
Dwelling Units* (thousands of units)	One Family Houses	800	980	+23
	Multifamily Housing	203	170	-16
	Total Residential Buildings	1,003	1,150	+15
Floor Area (millions of square feet)	One Family Houses	1,443	1,725	+20
	Multifamily Housing	237	185	-22
	Total Residential Buildings	1,680	1,910	+14
Contract Value (millions of dollars)	One Family Houses	$ 83,192	$102,700	+23
	Multifamily Housing	13,168	10,775	-18
	Total Residential Buildings	$ 96,360	$113,475	+18
Nonbuilding Construction				
Contract Value (millions of dollars)	Transportation Construction	$ 29,903	$ 32,700	+9
	Environmental Construction	15,273	15,600	+2
	Total Public Works	$ 45,176	$ 48,300	+7
	Utilities	$ 4,574	$ 4,800	+5
	Total Nonbuilding Construction	$ 49,750	$ 53,100	+7
All Construction				
Contract Value (millions of dollars)	**Total Construction**	$231,130	$250,725	+8
	Dodge Index (1987=100)	89	97	

*F.W. Dodge basis

1992 Regional Estimates
Dodge Construction Potentials

Second Update
July 1992

Northeast	CT, ME ,MA, NH, NJ, NY, PA, RI, VT	1991 Actual	1992 Forecast	Percent Change 1992/91		1991 Actual	1992 Forecast	Percent Change 1992/91
Contract Value (millions of dollars)	**Nonresidential Building**				**Residential Building**			
	Commercial and Manufacturing	$ 6,587	$ 6,200	-6	One Family Houses	$10,317	$12,000	+16
	Institutional and Other	9,110	9,475	+4	Multifamily Housing	2,625	2,000	-24
	Total	$15,697	$15,675	–	**Total**	$12,942	$14,000	+8
	Nonbuilding Construction	$10,777	$11,600	+8	**Total Construction**	$39,416	$41,275	+5

North Central	IL, IN, IA, KS, MI, MN, MO, NE, ND, OH, SD, WI	1991 Actual	1992 Forecast	Percent Change 1992/91		1991 Actual	1992 Forecast	Percent Change 1992/91
Contract Value (millions of dollars)	**Nonresidential Building**				**Residential Building**			
	Commercial and Manufacturing	$ 9,063	$ 9,525	+5	One Family Houses	$19,240	$24,575	+28
	Institutional and Other	9,581	10,775	+12	Multifamily Housing	2,813	2,925	+4
	Total	$18,644	$20,300	+9	**Total**	$22,053	$27,500	+25
	Nonbuilding Construction	$10,213	$11,400	+12	**Total Construction**	$50,910	$59,200	+16

South Atlantic	DE, DC, FL, GA, MD, NC, SC, VA, WV	1991 Actual	1992 Forecast	Percent Change 1992/91		1991 Actual	1992 Forecast	Percent Change 1992/91
Contract Value (millions of dollars)	**Nonresidential Building**				**Residential Building**			
	Commercial and Manufacturing	$ 7,438	$ 7,350	-1	One Family Houses	$19,544	$25,450	+30
	Institutional and Other	8,967	8,300	-7	Multifamily Housing	2,843	2,100	-26
	Total	$16,405	$15,650	-5	**Total**	$22,387	$27,550	+23
	Nonbuilding Construction	$ 8,263	$ 8,700	+5	**Total Construction**	$47,055	$51,900	+10

South Central	AL, AR, KY, LA, MS, OK, TN, TX	1991 Actual	1992 Forecast	Percent Change 1992/91		1991 Actual	1992 Forecast	Percent Change 1992/91
Contract Value (millions of dollars)	**Nonresidential Building**				**Residential Building**			
	Commercial and Manufacturing	$ 6,046	$ 6,025	–	One Family Houses	$12,060	$16,500	+37
	Institutional and Other	6,638	6,575	-1	Multifamily Housing	995	925	-7
	Total	$12,684	$12,600	-1	**Total**	$13,055	$17,425	+33
	Nonbuilding Construction	$ 8,239	$ 8,500	+3	**Total Construction**	$33,978	$38,525	+13

West	AK, AZ, CA, CO, HI, ID, MT, NV, NM, OR, UT, WA, WY	1991 Actual	1992 Forecast	Percent Change 1992/91		1991 Actual	1992 Forecast	Percent Change 1992/91
Contract Value (millions of dollars)	**Nonresidential Building**				**Residential Building**			
	Commercial and Manufacturing	$11,265	$ 10,325	-8	One Family Houses	$22,031	$24,175	+10
	Institutional and Other	10,325	9,600	-7	Multifamily Housing	3,892	2,825	-27
	Total	$21,590	$19,925	-8	**Total**	$25,923	$27,000	+4
	Nonbuilding Construction	$12,258	$12,900	+5	**Total Construction**	$59,771	$59,825	–

less. Either way, there's no avoiding the reality that most of the thrust that is available from one family housing will soon have been exhausted. As the momentum generated by homebuilding fades into stability, the continued expansion of total construction contracting will be increasingly dependent upon nonresidential building and public works.

Income Properties: Development of commercial buildings and multifamily housing faces two formidable obstacles. The more familiar of them is the ongoing resolution of the late-1980s banking crisis (which, by now, has been downgraded to a serious problem). But as the overextended banking industry gradually gets its "nonperforming assets" to perform, another obstacle — the shrinking demographic base for this group of building types — will complicate the assimilation of the vast surplus of vacant commercial space.

A sharp decline of the birth rate in the

1970s (the so-called "baby bust") is currently working its way through the young adult cohort — ages 18 to 35. With more people reaching age 36 than are becoming 18, the number of young adults will shrink by 5 million individuals between 1990 and 1995, and by another 3 million by 2000. This group, which provides the new entrants to the labor force as well as most of the nation's renters, is the part of the population that must occupy all those empty offices and apartments left over from the mid-80s' commercial building binge. Yet, the young adult population is shrinking at a rate of a million a year!

With financial constraints inhibiting a recovery in the short run, and adverse demographic developments limiting longer run expansion, the prospect for a sustained revival of commercial building is bleak, indeed. One exception is retail building. In another year or so, demand for stores and shopping centers should begin to respond, as it usually does, to the currently strong volume of single family home building.

In the balance of 1992, even a modest improvement over the deeply depressed first half rate of contracting for income properties will leave another net decline (-7 percent) for the year as a whole. A tentative turnaround is possible in 1993, but anything deserving the label "recovery" won't happen until late in this new building cycle.

THE STABILIZERS

Institutional Buildings: A decade of small but steady gains in contracting for institutional buildings (schools, health care facilities, public administration buildings, jails, etc.) has been brought to a standstill by the recession's squeeze on state budgets. By 1992, the combination of revenue shortfall and the soaring cost of entitlements was forcing a change of priorities.

In the latest (April) Fiscal Survey of the States, the National Governors' Association comes to grips with these harsh realities. Projected revenue growth for fiscal years 1992 and 1993, at 5 and 4 percent respectively, contrast with double-digit increases in the cost of Medicaid programs and corrections. Reduced investment in schools and infrastructure is the necessary tradeoff, and the stress is particularly evident in contracting for educational building, the biggest component of the institutional group. At mid-1992, the value of newly started schools and related facilities was 12 percent below its year-earlier level.

State budgets typically cover a fiscal year beginning on July 1, and the near-term outlook (1992/93) for state-funded institutional building is one of continued austerity. In a political environment of "no new taxes" and an economic environment of sluggish recovery, states have little choice but to defer discretionary spending for at least another year.

Public Works Construction: Infrastructure work will be dominated by the new (December, 1991) Intermodal Surface Transportation Efficiency Act, which is expected to provide up to $155 billion of Federal funding for highways, bridges and mass transit over the next six years. This represents a 20 percent escalation of user fee financed highway construction.

If DOT's spending authority under the new legislation is fully appropriated, transportation-related construction is slated to advance by increments of 10 percent in both 1992 and 1993, and then to hold steady at this higher level. Contracting in 1992 is heading for something close to the potential 10 percent gain, but there is growing resistance in Congress to appropriating all of ISTEA's authorized funds for fiscal year 1993.

The transfer of funding for sewer/waste treatment facilities from direct EPA grants to State Revolving Funds (SRFs) continues to inhibit this important category of public works construction. A recent EPA evaluation of the situation concludes that "At this time, State funding...does not appear to be increasing sufficiently to offset the phase-out of Federal SRF monies." Under these circumstances, annual growth of contracting for waste treatment facilities will barely keep pace with inflation.

THE SECOND HALF

1992 started well enough to justify a forecast of a 10 percent improvement of construction contracting over the 1991 total. Due to a weak second quarter, however, it's now necessary to fine tune the year's outlook downward to a gain of 8 percent. There's still a recovery in the making, but to achieve 8 percent for the year as a whole will require a better second half. Where will the second half improvement be coming from? The table on this page gives the details.

- **The stabilizers** will live up to their name during the rest of 1992, offering little change from their first half rate of contracting.
- **The cyclicals** are the obvious place to look for action. One family housing still has room for expansion, and falling interest rates will help make it happen. Income properties are also capable of a better second half, but any improvement there will be confined to multi-family housing.

CONSTRUCTION CONTRACT VALUE
Seasonally Adjusted Annual Rates, In Billions

	1st Half, 1992	2nd Half, 1992	Percent Change
THE CYCLICALS	**$148.6**	**$157.2**	**+6**
One Family Homes	99.4	105.9	+7
Income Properties	41.7	43.9	+5
Industrial Bldgs.	7.5	7.4	-1
THE STABILIZERS	**$ 93.8**	**$ 92.3**	**-2**
Institutional Bldgs.	45.1	44.3	-2
Public Works Const.	48.7	48.0	-1
TOTAL CONSTRUCTION	**$247.4**	**$254.0**	**+3**

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